5

10

15

20

25

30

35

WHAT IS CLAIMED IS:

- 1. A fuel cell system comprising:
 - a fuel cell;
 - a fuel gas supply line supplying fuel gas to the fuel cell;
 - an oxidizing gas supply line supplying oxidizing gas to the fuel cell;
- a circulation line circulating fluid through at least one of the fuel cell, the fuel gas supply line and the oxidizing gas supply line; and
- a microorganism inhibiting unit located in the circulation line to execute sterilization so as to sterilize microorganisms present in the fluid.
- 2. A fuel cell system according to claim 1, wherein the fluid is composed of coolant fluid cooling the fuel cell.
- 3. A fuel cell system according to claim 1, wherein the fluid is composed of moistening fluid moistening at least one of the fuel gas and the oxidizing gas.
- 4. A fuel cell system according to claim 1, wherein the microorganism inhibiting unit includes a ultraviolet light irradiation device which executes the sterilization through irradiation of ultraviolet light.
- 5. A fuel cell system according to claim 1, further comprising a detector detecting the microorganisms;

wherein the microorganism inhibiting unit is operative to execute the sterilization responsive to a detected result of the detector.

6. A fuel cell system according to claim 1, further comprising an ultraviolet light irradiator device irradiating ultraviolet light,

wherein when the microorganism is detected by the ultraviolet light irradiated with a first power, the sterilization is executed with the ultraviolet light with a second power larger than the first power.

- 7. A fuel cell system according to claim 6, wherein the ultraviolet irradiator device is located in the microorganism inhibiting unit.
- 8. A fuel cell system according to claim 1, wherein the sterilization is executed at given time intervals.
- 9. A fuel cell system according to claim 1, wherein the sterilization is executed in dependence on surplus power of the fuel cell system.
- 10. A fuel cell system according to claim 9, wherein the sterilization in the presence of the surplus power is executed at frequencies higher than those at which the sterilization is executed in the absence of the surplus power.

25

5

10

11. A fuel cell system according to claim 9, further comprising a detector detecting the microorganism;

wherein the sterilization is executed in dependence on the a detected result of the detector.

- 12. A fuel cell system according to claim 9, wherein the sterilization is executed further in dependence on allowance power of the fuel cell system.
- 13. A fuel cell system according to claim 12, wherein the sterilization is executed regardless of the presence of or the absence of the microorganisms.
- 14. A fuel cell system comprising:

a fuel cell;

fuel gas supply means for supplying fuel gas to the fuel cell;

oxidizing gas supply means for supplying oxidizing gas to the fuel cell:

circulation means for circulating fluid through at least one of the fuel cell, the fuel gas supply means and the oxidizing gas supply means; and

microorganism inhibiting means for executing sterilization so as to sterilize microorganisms present in the fluid in a midway of the circulation means.

15. A method of inhibiting microorganisms in a fuel cell system, the method comprising:

preparing a fuel cell;

preparing a gas supply line supplying fuel gas and oxidizing gas to the fuel cell;

circulating fluid through at least one of the fuel cell and the gas supply line; and

sterilizing the microorganisms present in the fluid in a midway through which the fluid is circulated.

18